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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,835	01/16/2002	Amy W. Lasek	PA-0044 US	1180

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EXAMINER	
ZHOU, SHUBO	
ART UNIT	**PAPER NUMBER**
1631	

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,835	LASEK ET AL.	
	Examiner	Art Unit	
	Shubo "Joe" Zhou	1631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 November 2003 and 17 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *7-11 and 16-20* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 12-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/5/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☒ Other: *See Continuation Sheet*.

Continuation of Attachment(s) 6). Other:

(1) Sequence alignment between SEQ ID NO:11 of application 10/051,835 and SEQ ID NO: 126 of 09/974,298 (or US Pub. No. 2002/0156263).

(2) Sequence alignment between SEQ ID NO:11 of application 10/051,835 and SEQ ID NO: 7 of 09/996,952 (or US Pub. No 2003/0170627).

(3) Sequence alignment between SEQ ID NO:11 of application 10/051,835 and SEQ ID NO: 35 of 10/093,766.

(4) Sequence alignment between SEQ ID NO:18 of application 10/051,835 and SEQ ID NO: 692 of 10/044,090 (or US Pub. No. 2002/0137081).

(5) Sequence alignment between SEQ ID NO:25 of application 10/051,835 and SEQ ID NO: 197 of 10/084,817.

DETAILED ACTION

Restriction/Election

1. Applicants' election, with traverse, of Group I (claims 1-6) and the combination of SEQ ID NOS:1-25 in the communication filed 2/17/04 is acknowledged. It is noted that applicants elected SEQ ID NOS: 1, 11-18, and 25 for the initial search. Applicants cite the Office's policy set forth in MPEP 803.04 regarding restriction involving nucleotide sequences and argue that Groups I and IV should be examined together. Upon consideration of the argument and in light of what is set forth in the MPEP section 803.04, Groups I (claims 1-6) and IV (claims 12-14) are joined and considered in this action. Although the combinations in claims 2-3 are different from the elected combination in claim 1, they comprise SEQ ID NOS which are also comprised in the elected combination in claim 1, and the sequences are searched for the elected combination. Thus, claims 2-3 are joined due to lack of search burden. Furthermore, upon further consideration, Group V (claim 15), drawn to a method of making a polypeptide using the isolated nucleic acids of group IV, is also joined for consideration.

Accordingly, claims 1-20 are pending, and claims 1-6, and 12-15 are under consideration. Claims 7-11, and 16-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the communication filed 2/17/04.

The examiner has required restriction between product and process claims in the previous Office action mailed 10/3/03. If the product claims are subsequently found allowable,

withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder.

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Sequence Rules Compliance

2. This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 because of the following reasons. Firstly, many of those sequences such as those in Figs 1, 2A-2C are not identified by a sequence identifier ("SEQ ID NO:X"). Applicants are reminded that it is required that SEQ ID Nos be amended into the specification at each sequence, and that when a sequence is presented in a drawing, regardless of the format or the manner of presentation of that sequence in the drawing, the sequence must still be included in the Sequence Listing, and the sequence identifier must be used, either in the drawing or in the Brief Description of the Drawings. Secondly, these sequences that are not identified by a sequence identifier are not listed in the Sequence Listing. It is noted that all the sequences presented in Figs 1, 2A-2C are amino acid sequences whereas the sequences of SEQ ID NOS:1-25 provided in the Sequence Listing are all nucleotide sequences. A paper copy and computer readable form of the amended Sequence Listing including all the disclosed sequences that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2), as well as a statement under 37 CFR 1.821(f), are required.

Applicants are given the same response time regarding this failure to comply as that set forth to respond to this office action. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be

obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

Information Disclosure Statement

3. The Information Disclosure Statement filed 3/5/02 has been entered and considered. Initialed copy of the form PTO-1449 is enclosed with this action.

4. The citations/listings of publications and/or patents in various sections of the specification such as those on pages 1-2 are not a proper Information Disclosure Statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, the references have not been considered unless they are cited by the examiner on form PTO-892.

Specification

5. The specification is objected to because of the following informalities:

6. The specification refers to Tables 1-3 but the tables are not in the specification as filed. A search of the application file found three sheets labeled Tables 1-3 in the file but they are not page-numbered in relation to the specification, but rather all three sheets of the tables are confusingly numbered "page 1 0f 1". The pages containing the Tables should be re-numbered.

7. Column 3 of Table 3 is supposed to denote the nucleotide number where the start codon of the open reading frame starts (see specification pages 4-5). However, the nucleotide number

"226" at column 3 for SEQ ID NO:4 appears to be in error: An inspection of the sequence by the Examiner finds that the codon at nucleotides 226-228 is CTT encoding a leucine whereas codon at nucleotides 220-222 is the start codon ATG which also encodes a methionine. Thus, it appears that "226" should be changed to "220".

8. The specification on page 5 states that "Figure 1 shows an alignment between GAGE family members including SEQ ID NO:1 (980547.1, reading frame +2), SEQ ID NO:2 (4030354C8 1, reading frame +2), and SEQ m N0:11 (064516CB 1, reading frame +2)," ... and "Figures 2A, 2B, and 2C show an alignment between MAGE family members including SEQ ID NO:4 (1471808CB1, reading frame +1) and SEQ ID NO:6 (1097797.1, reading frame +1)." This appears to be incorrect because the sequences present in Figures 1 and 2 are all amino acid sequences while SEQ ID NOS: 1, 2, 4, 6, and 11 are all nucleotide sequences.

Appropriate correction is required.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 12-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-12, respectively, of US copending Application No. 09/974,298. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claims because the examined claim is either anticipated by, or would have been obvious over, the reference claims. See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 12-15 of the instant application are drawn to an isolated cDNA selected from a groups of sequences including SEQ ID NO:11, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell.

Claims 9-12 of US copending Application No. 09/974,298 are drawn to isolated cDNA selected from a groups of sequences including SEQ ID NO:126, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. Sequence

comparison shows that SEQ ID NO:126 of copending Application No. 09/974,298 is identical to the sequence of SEQ ID NO:11 of the instant application. See the attached sequence alignment between the two polynucleotide sequences. Thus, claims 12-15 are anticipated by claims 9-12 of US copending Application No. 09/974,298.

Therefore, claims 12-15 are directed to an invention not patentably distinct from claims 9-12 of commonly assigned U.S. Application No. 09/974,298 for reasons set forth above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned U.S. Application No. 09/974,298, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

11. Claims 12-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-3, and 9-11 of US

copending Application No. 09/996,952. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claims because the examined claim is either anticipated by, or would have been obvious over, the reference claims. See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 12-15 of the instant application are drawn to an isolated cDNA selected from a groups of sequences including SEQ ID NO:11, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on an isolated cDNA having the sequence of SEQ ID NO:11, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells.

Claims 2-3, and 9-11 of US copending Application No. 09/996,952 are drawn to isolated cDNA selected from a groups of sequences including SEQ ID NO:7, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on isolated cDNA having the sequence of SEQ ID NO:7, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells. Sequence comparison shows that SEQ ID NO:7 of copending Application No. 09/996,952 is identical to the sequence of SEQ ID NO:11 of the instant application. See the attached sequence alignment between the two polynucleotide sequences. Thus, claims 12-15 are anticipated by claims 2-3, 9-11 of US copending Application No. 09/996,952.

Therefore, claims 12-15 are directed to an invention not patentably distinct from claims 2-3, and 9-11 of commonly assigned U.S. Application No. 09/996,952 for reasons set forth above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned U.S. Application No. 09/996,952, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

12. Claims 12-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 14-17, respectively, of US copending Application No. 10/093,766. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the

reference claims because the examined claim is either anticipated by, or would have been obvious over, the reference claims. See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 12-15 of the instant application are drawn to an isolated cDNA selected from a groups of sequences including SEQ ID NO:11, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on isolated cDNA having the sequence of SEQ ID NO:11, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells.

Claims 14-17 of US copending Application No. 10/093,766 are drawn to isolated cDNA selected from a groups of sequences including SEQ ID NO:35, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on isolated cDNA having the sequence of SEQ ID NO:35, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells. Sequence comparison shows that SEQ ID NO:35 of copending Application No. 10/093,766 is identical to the sequence of SEQ ID NO:11 of the instant application. See the attached sequence alignment between the two polynucleotide sequences. Thus, claims 12-15 are anticipated by claims 14-17 of copending Application No. 10/093,766.

Note that although claims 14-17 of copending Application No. 10/093,766 are restricted and not elected, the claims are still pending in the application.

13. Claims 12-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10-13, respectively, of US

copending Application No. 10/044,090. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the reference claims because the examined claim is either anticipated by, or would have been obvious over, the reference claims. See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 12-15 of the instant application are drawn to an isolated cDNA selected from a groups of sequences including SEQ ID NO:18, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on cDNA having the sequence of SEQ ID NO:18, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells.

Claims 10-13 of US copending Application No. 10/044,090 are drawn to isolated cDNA selected from a groups of sequences including SEQ ID NO:692, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on cDNA having the sequence of SEQ ID NO:692, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells. Sequence comparison shows that SEQ ID NO:692 of copending Application No. 10/044,090 is identical to the sequence of SEQ ID NO:18 of the instant application. See the attached sequence alignment between the two polynucleotide sequences. Thus, claims 12-15 are anticipated by claims 10-13 of US copending Application No. 10/044,090.

Note that although claims 10-13 of copending Application No. 10/044,090 are restricted and not elected, the claims are still pending in the application.

Therefore, claims 12-15 are directed to an invention not patentably distinct from claims 10-13 of commonly assigned U.S. Application No. 10/044,090 for reasons set forth above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302). Commonly assigned U.S. Application No. 10/044,090, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 35 U.S.C. 103(c) and 37 CFR 1.78(c) to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

14. Claims 12-15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-12, respectively, of US copending Application No. 10/084,817. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

An obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but an examined application claim is not patentably distinct from the

reference claims because the examined claim is either anticipated by, or would have been obvious over, the reference claims. See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985). Although the conflicting claims are not identical, they are not patentably distinct from each other.

Claims 12-15 of the instant application are drawn to an isolated cDNA selected from a groups of sequences including SEQ ID NO:25, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on cDNA having the sequence of SEQ ID NO:25, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells.

Claims 9-12 of US copending Application No. 10/084,817 are drawn to isolated cDNA selected from a groups of sequences including SEQ ID NO:197, a vecor or host cell containing the isolated cDNA, or a method of making a polypeptide using the host cell. The claims read on cDNA having the sequence of SEQ ID NO:197, vectors and host cells comprising the cDNA and method of making a polypeptide using the host cells. Sequence comparison shows that SEQ ID NO:197 of copending Application No. 10/084,817 is identical to the sequence of SEQ ID NO:25 of the instant application. See the attached sequence alignment between the two polynucleotide sequences. Thus, claims 12-15 are anticipated by claims 9-12 of US copending Application No. 10/084,817.

Note that although SEQ ID NO:197 of 10/084,817 is not elected in response to the Office's restriction requirement, claims 9-12 have not been amended to the elected invention.

Claim Rejections-35 USC § 112

15. The following is a quotation of the **second** paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 1-6 are rejected under 35 U.S.C. 112 , second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The meaning of the limitation "differentially expressed in cells treated with a DNA demethylating agent" in claim 1 and in its dependent claims 2-6 is not clear. Are the cDNAs differentially expressed among the cells treated with a DNA demethylating agent, such as among cells treated with different amounts of the agent? Or are they differentially expressed between cells treated and untreated? The metes and bounds of the claims are thus unclear. Similarly, the limitations of "upregulated" in claim 2 and "downregulated" in claim 3 are vague. It is not clear in what cells these nucleic acids are upregulated or downregulated, in cells treaded compared to untreated or else. Furthermore, strictly speaking, it is not the cDNAs that are differentially expressed, but rather it is the mRNAs, from which the cDNAs are derived, are differentially expressed.

Claim Rejections-35 USC § 102

17. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

18. Claims 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by any of Chen, H-M, US Pub. No. 2002/0156263 (102(e) date: 10/5/00), Walker et al. US Pub. No. 2003/0170627 (102(e) date: 11/27/00), and Bandman, O. US Pub. No. 2002/0137081 (102(e) date: 1/8/01).

The applied references have a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the references, they constitute prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the references was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Chen discloses a cDNA (SEQ ID NO:126) with the same sequence as SEQ ID NO: 11 of the instant application (See the attached alignment between the two sequences). Walker et al. disclose a cDNA (SEQ ID NO:7) with the same sequence as SEQ ID NO: 11 of the instant application (See the attached alignment between the two sequences). Bandman discloses a cDNA (SEQ ID NO:692) with the same sequence as SEQ ID NO: 18 of the instant application (See the attached alignment between the two sequences). The three references also disclose vector and host cells containing the cDNA and a method of making a polypeptide using the cDNA, the vector or the host cells. Thus, the nucleic acids, vedors, host cells, and the method of claims 12-15 are anticipated by the nucleic acids, vedors, host cells, and methods taught in any one of the references.

Conclusion

19. No claim is allowed.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shubo (Joe) Zhou, whose telephone number is 571-272-0724. The examiner can normally be reached Monday-Friday from 8 A.M. to 4 P.M. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on 571-272-0722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst William Phillips whose telephone number is 571-272-0548, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shubo (Joe) Zhou, Ph.D.

Patent Examiner